

SEQUENCE LISTING



<110> GILL, Peter  
HUSSAIN, Javaid  
LONG, Adam

<120> Improvements in and relating to analysis of DNA

<130> 7500.331USC1

<140> 10/034,692

<141> 2001-12-27

<150> PCT/GB00/02795

<151> 2000-07-24

<150> GB9917307.2

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<150> GB0009187.6

<151> 2000-04-14

<160> 42

<170> PatentIn Ver. 2.1

<210> 1

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: An artificial universal primer sequence designed to act as a molecular beacon and referred to at page 13 of the application.

25

<400> 1  
acgcgctctc ttcttctttt gcgcg

<210> 2

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: An artificial universal reporter primer forward sequence designed to optimally prime at 60 degrees C, page 29.

20

<400> 2  
cgacgtggtg gatgtgctan

<210> 3

<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: An artificial  
universal primer reverse sequence designed to  
optimally prime at approximately 60 degrees C,  
page 29.

<400> 3  
tgacctggct gactcgactg 20

<210> 4  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: An artificial  
universal primer reverse sequence designed to  
optimally prime at 60 degrees C, page 30.

<400> 4  
tgccgtggct gacctgagac 20

<210> 5  
<211> 20  
<212> DNA  
<213> Homo sapiens

<400> 5  
gtattttcgt ctggggggta 20

<210> 6  
<211> 21  
<212> DNA  
<213> Homo sapiens

<400> 6  
gtctgtcttt gattcctgcc c 21

<210> 7  
<211> 20  
<212> DNA  
<213> Homo sapiens

<400> 7  
tttgattcct gcctcatccc 20

<210> 8  
<211> 20

<212> DNA  
<213> Homo sapiens

<400> 8  
atattacagg cgaacatacc 20

<210> 9  
<211> 27  
<212> DNA  
<213> Homo sapiens

<400> 9  
gcttgtagga cataataata acaatta 27

<210> 10  
<211> 22  
<212> DNA  
<213> Homo sapiens

<400> 10  
cagagatgtg tttaagtgt gt 22

<210> 11  
<211> 19  
<212> DNA  
<213> Homo sapiens

<400> 11  
accagctttg ccagttccm 19

<210> 12  
<211> 16  
<212> DNA  
<213> Homo sapiens

<400> 12  
ttccgtgggt gtggck 16

<210> 13  
<211> 21  
<212> DNA  
<213> Homo sapiens

<400> 13  
ggcagagcga ctaaaagcaa a 21

<210> 14  
<211> 37  
<212> DNA  
<213> Artificial Sequence

$\langle 220 \rangle$ 

<223> Description of Artificial Sequence: A human Gc forward primer with an artificial universal primer tag to detect a SNP polymorphism at Gc1s/1f, page 47.

<400> 14

cgacgtggtg gatgtgctag gtccgtggg tgtggcc

37

<210> 15

<211> 41

<212> DNA

<213> Artificial Sequence

 $\langle 220 \rangle$ 

<223> Description of Artificial Sequence: A Human Gc reverse primer with an artificial universal primer tag to detect a SNP polymorphism at Gc1s/1f, page 47.

<400> 15

tgacgtggct gacctgagac ggcagagcga ctaaaagcaa a

41

<210> 16

$\langle 211 \rangle$  45

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: An artificial universal molecular beacon primer sequence designed to detect universal primer 9G polymorphism, page 47.

<400> 16

acgcgctctc ttcttctttt gcgcgcgacg tggtggatgt gctag

45

<210> 17

<211> 20

<212> DNA

### <213> Artificial Sequence

 $\langle 220 \rangle$ 

<223> Description of Artificial Sequence: An artificial reverse primer sequence designed to detect universal reverse 11 primer sequence, page 47.

<400> 17

tgacgtggct gacctgagac

20

<210> 18

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: A human Gc forward primer attached to an artificial universal primer tag to detect a SNP polymorphism at Gcls/1f, page 48.

<400> 18

cgacgtggtg gatgtgctag accagctttg ccagttccg

39

<210> 19

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: A human Gc forward primer attached to an artificial universal primer tag to detect a SNP polymorphism at Gcls/1f, page 48.

<400> 19

cgacgtggtg gatgtgcttc`accagctttg ccagttcct

39

<210> 20

<211> 37

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: A human Gc forward primer attached to an artificial universal primer tag to detect a SNP polymorphism at Gcls/1f, page 48.

<400> 20

cgacgtggtg gatgtgctag gttccgtggg tgtggcc

37

<210> 21

<211> 37

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: A human Gc forward primer attached to an artificial universal primer tag to detect a SNP polymorphism at Gcls/1f, page 48.

<400> 21

cgacgtggtg gatgtgcttc gttccgtggg tgtggca

37

<210> 22  
<211> 41  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: A human Gc reverse primer attached to an artificial universal primer tag to detect SNP polymorphisms at Gcls/1f, page 48.

<400> 22  
tgacgtggct gacctgagac ggcagagcga ctaaaagcaa a 41

<210> 23  
<211> 45  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: An artificial molecular beacon forward primer attached to a universal primer tag to detect universal primer 9G polymorphism.

<400> 23  
acgcgctctc ttcttctttt gcgcgcgacg tgggtgatgt gctag 45

<210> 24  
<211> 45  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: An artificial molecular beacon forward primer attached to a universal primer tag to detect universal primer 9C polymorphism.

<400> 24  
acgcgctctc ttcttctttt gcgcgcgacg tgggtgatgt gcttc 45

<210> 25  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: An artificial reverse universal primer designed to detect universal 11 sequence, page 48.

<400> 25  
tgacgtggct gacctgagac 20

<210> 26  
<211> 41  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: A Human  
Amelogenin sequence forward primer attached to an  
artificial universal sequence to detect Amelogenin  
X polym.

<400> 26  
cgacgtgggtg gatgtgcttc tgagccaatg gtaaactgc c

41

<210> 27  
<211> 41  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: A Human  
Amelogenin sequence forward primer attached to an  
artificial universal sequence to detect Amelogenin  
Y polym.

<400> 27  
cgacgtgggtg gatgtgctag tgagccaatg gtaaactgc a

41

<210> 28  
<211> 46  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: A Human  
Amelogenin sequence reverse primer attached to an  
artificial universal sequence to detect Amelogenin  
X/Y polymorphism; n designates inosine..

<400> 28  
tgacgtggct gacctgagac cataggaagn gtactgggtga gaaaca

46

<210> 29  
<211> 45  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: An artificial  
molecular beacon forward primer attached to a  
universal primer tag to detect universal primer 9G  
polymorphism.

1001344592 05240022

<400> 29  
acgcgctctc ttctttctttt gcgcgcgacg tgggtggatgt gctag 45

<210> 30  
<211> 45  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: An artificial molecular beacon forward primer attached to a universal primer tag to detect universal 9C polymorphism, page 49.

<400> 30  
acgcgctctc ttctttctttt gcgcgcgacg tgggtggatgt gcttc 45

<210> 31  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: An artificial reverse universal primer designed to detect universal 11 sequence, page 48.

<400> 31  
tgacgtggct gacctgagac 20

<210> 32  
<211> 37  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: An artificial forward universal primer attached to human Gc1s sequence, page 57.

<400> 32  
ctagctgggtg gctgtgctag gttccgtggg tgtggcc 37

<210> 33  
<211> 41  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: An artificial reverse universal primer attached to human Gc sequence to detect Gc1s/1f polymorphisms, page 57.



<400> 33  
ctagctggtg gctgtgctag ggcagagcga ctaaaagcaa a 41

<210> 34  
<211> 42  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: A human  
alpha-1- antitrypsin forward sequence attached to  
an artificial universal primer to detect  
alpha-1.M1S polym.

<400> 34  
ctagctggtg gctgtgctag aggggaaact acagcacctg ga 42

<210> 35  
<211> 42  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: A human  
alpha-1- antitrypsin foward sequence attached to  
an artificial universal primer to detect alpha-1.S  
polym, Fig 11.

<400> 35  
ctagcctggt gtgtggctag aggggaaact acagcacctg gt 42

<210> 36  
<211> 43  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: A human  
alpha-1- antitrypsin reverse sequence attached to  
an artificial universal primer to detect  
alpha-1.M1S polym.

<400> 36  
ctagctgctg tggtggctag tggtgatgat atcgtgggtg agt 43

<210> 37  
<211> 27  
<212> DNA  
<213> Homo sapiens

<400> 37  
cctgaagcca caccacgga actggca 27

<210> 38  
<211> 18  
<212> DNA  
<213> Homo sapiens

<400> 38  
agttccgtgg gtgtggcc

18

<210> 39  
<211> 27  
<212> DNA  
<213> Homo sapiens

<400> 39  
cctgaggcca cacccacgga actggca

27

<210> 40  
<211> 27  
<212> DNA  
<213> Homo sapiens

<400> 40  
cctgaggcca cacccaagga actggca

27

<210> 41  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Self  
complimentary universal forward reporter primer  
artificial sequence, Figure 25c.

<400> 41  
ctagctggtg gctgtgctag

20

<210> 42  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Self  
complimentary universal reverse reporter primer  
artificial sequence, Figure 25c.

<400> 42  
ctagctggtg gctgtgctag

20